

## Opencut Mining Program

September 15, 2006

Subject: Valley Sand & Gravel, LLC (Valley) – Dahl Site – Comments on the Draft EA

To all Interested Parties:

On June 14, 2006, Valley applied for a permit to mine and crush gravel from a 5.5-acre site from the north side of Holmes Gulch approximately 800' above the rail road tracks. The site is approximately 2 miles south of East Helena. The operation would be reclaimed by 2009 to grassland.

The Environmental Assessment (EA) attached to this letter identifies and analyzes impacts of the requested actions. It has been mailed to all parties that have shown an interest in the project, including local residents, county commissioners, the EPA, and the East Helena Lead Program. Copies of this document are all available on-line at <http://deq.mt.gov/ea/opencut.asp>.

After reading this draft Environmental Assessment, if you have any questions, concerns, or comments, you can mail them to me at the Department of Environmental Quality, IEMB, 1520 East 6<sup>th</sup> Ave, Helena, MT, 59620, fax them at 444-1923, or e-mail me at [pmahrt@mt.gov](mailto:pmahrt@mt.gov). Please call me at 406-444-1515 if you have any questions. Comments must be submitted by Wednesday, September 27, 2006.

Thank you.

Sincerely,

Peter Mahrt, Opencut Supervisor  
Industrial and Energy Minerals Bureau  
Ph: 406.444.1515  
Fax: 406.444.1923  
[pmahrt@mt.gov](mailto:pmahrt@mt.gov)

PM/dv

Attachments

# ENVIRONMENTAL ASSESSMENT

## DRAFT

### Valley Sand & Gravel, LLC Dahl Gravel Pit Holmes Gulch

An environmental assessment (EA) is required under the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose and analyze the impacts of an action, in this case operating a gravel pit over which the state must make a decision, so that an informed decision can be made. MEPA sets no environmental standards even though it requires analysis of both the natural and human environment. This document may disclose many impacts that have no legislatively required standards or over which there is no regulatory authority. The state legislature has provided no authority in MEPA to allow the Department of Environmental Quality (DEQ), or any other state agency, to require conditions or impose mitigations on a proposed permitting action that are not included in the permitting authority and operating standards in the governing state law, such as the Opencut Mining Act, the Clean Air Act of Montana, or any other applicable state environmental regulatory law. Beyond that, a company may agree to voluntarily modify its proposed activities or accept permit conditions.

The state law that regulates gravel-mining operations in Montana is the Opencut Mining Act. This law and its approved rules place operational guidance and limitations on a gravel-mining project during its life, and provides for the reclamation of permitted land area. This law requires that a surety bond, cash deposit or other financial instrument be submitted to the state to cover the complete costs of reclaiming the site to its approved, post-mining land use.

The permit decision cannot be based upon the popularity of the project, but upon whether or not the proponent has met the requirements of the Opencut Mining Act, pursuant rules, and other laws pertaining to its proposed actions.

**PROPONENT:** Valley Sand & Gravel, LLC  
**LOCATION:** Section 1, T9N, R3W

**SITE NAME:** Dahl Site  
**COUNTY:** Jefferson

**TYPE AND PURPOSE OF ACTION:** Proponent submitted an application to the Opencut Mining Program for a 5.5-acre permit to mine about 20,000 cubic yards of gravel approximately 2 miles south of East Helena, Montana in the area known as Holmes Gulch. Operations would begin at valley elevation and progress at this grade into the adjacent hill slope. Initially, mined material would be screened, crushed, and mixed with near-by dredge tailings for use in construction of roads on an adjacent property: the drainage bottom of Holmes Gulch was dredge-mined approximately a century ago. Reclamation of the permit area would be complete by June 2009. All application materials required under the Opencut Mining Act and the rules adopted thereunder have been submitted. The proponent commits to properly conducting opencut operations and reclaiming past and present disturbances to a postmining land use of grazing. The proponent will be legally bound by its permit to reclaim the site as well as site conditions and available resources allow.

A = significant unavoidable impacts. B = insignificant as a result of conditioned mitigation. C = insignificant as proposed.

	POTENTIAL IMPACTS AND MITIGATIVE MEASURES					
	A	B	C	LONG TERM	SHORT TERM	EXPLANATION
<b>PHYSICAL ENVIRONMENT</b>						
1. <u>TOPOGRAPHY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Removal of gravel would alter the topography. No closed end depression would be left in the landscape but rather a three sided excavation that would resemble a valley in the side of a hill. All surfaces would be graded to 3:1 (h:v) or flatter.

2. <u>GEOLOGY</u> : stability	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>The topography in the area consists of rolling terrain dissected by narrow valleys. Holmes Gulch is one of these valleys. It flows west to east. Within the proposed permit area, the north side of the valley crests into rolling terrain approximately 50' above the valley bottom. At this point the valley is approximately 500' wide. Holmes Gulch crosses a railroad track approximately 800' down gradient of the proposed permit area and connects with Prickley Pear Creek. The drainage bottom was dredged many years ago from the tracks up gradient for approximately 1,400'. Dredge tailings have been dumped on both sides of the drainage within the narrow valley.</p> <p>The proposed excavation would be above any possible flows within Holmes Gulch and into the slope on the north side of the gulch. There is a berm, made of tailings, across the drainage just below the permit boundary. Within the permit area, there is no erosion in the drainage bottom and little vegetation. This section of the drainage is an area of aggradation. Potential impacts due to the removal of mine material have been reviewed. The Department has determined that proposed disturbances could be reclaimed to a condition that is at least as stable as pre-mine conditions.</p>
3. <u>SOILS</u> : quality, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Approximately 3" to 4" of soil would be salvaged from the top of the bench and where it could be safely accessed on the slope above to Holmes Gulch. A large area inside the proposed permit was disturbed by historic dredge mining and has no soils. There would not be enough native soil salvaged on-site to reclaim the areas proposed for use at this site. Any deficit in soil for reclamation of the site would be offset with near-by dredge tailings suitable for plant growth. Approximately 18" of material is planned for this purpose. The tailings are currently supporting extensive native vegetation.</p> <p>A remedial investigation of the chemical and physical properties of surface soils (0 to 1 inch) around the ASARCO plant in East Helena was summarized in the following May 1987 report by the Environmental Protection Agency (EPA), Hazardous Site Control Division (EPA Work Assignment No. 68-8L30.0): <i>Remedial Investigation of Soils, Vegetation and Livestock for East Helena Site (ASARCO)</i>. The soil sample grid for this investigation included Holmes Gulch and this proposed permit area. There were 13 samples taken in this area. The minimum,</p>

						maximum, and average lead concentrations are, respectively: 111, 336, and 193 mg/kg dry weight. These concentrations are below the 500 mg/kg EPA threshold for remedial action.
4. <u>WATER</u> : quality, quantity; distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>There are no wells within 1000' of the site. The site would not intersect the groundwater table. Use of water for dust control would have an insignificant impact on ground water levels.</p> <p>Removal of old dredge tailings within and outside of the proposed permit area would have a positive effect on surface water flows within Holmes Gulch. Two positive effects include removing obstructions to the floodplain and a source of sediment. Equipment crossing Holmes Gulch within the proposed permit would have an insignificant impact on surface water quality: the point of crossing would be in an area of stream aggradation and there is a pre-mine berm down gradient that would catch any sediment.</p> <p>No significant impacts to the surface water or ground water would be expected as a result of mining, soil salvage or product stockpiles because of limited contact with water. All stockpiles are proposed to be located outside the floodplain.</p>
5. <u>AIR</u> : quality	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p>There would be some degradation of air quality while operations are in progress. The proponent must comply with state air quality regulations and has committed to special handling of surface soils that could have elevated concentrations of lead. Special handling includes segregation and adding water as needed to control dust.</p>
6. <u>UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	None identified.
<b>BIOLOGICAL ENVIRONMENT</b>						
1. <u>TERRESTRIAL, AVIAN, AND AQUATIC SPECIES AND HABITATS</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Montana Natural Heritage Program reported no species of concern in the area. Abundant similar habitat exists in the area.
2. <u>VEGETATION</u> : quantity, quality, species	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The Montana Natural Heritage Program reports the wedge-leaved saltbush as a species of special concern for the area. No saltbush was identified in or adjacent to the permit area.
3. <u>AGRICULTURE</u> : grazing, crops, production	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A small area of grassland would be taken out of production without significant impact to local agriculture.
<b>HUMAN ENVIRONMENT</b>						
1. <u>SOCIAL</u> : structures, mores	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. <u>CULTURAL</u> : uniqueness, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. <u>POPULATION</u> : quantity, diversity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

4. <u>HOUSING</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. <u>HUMAN HEALTH &amp; SAFETY</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. <u>COMMUNITY &amp; PERSONAL INCOME</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. <u>EMPLOYMENT</u> : quantity, distribution	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
8. <u>TAX BASE</u> : local, state tax revenue	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
9. <u>GOVERNMENT SERVICES</u> : demand	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. <u>INDUSTRIAL, COMMERCIAL, &amp; AGRICULTURAL ACTIVITIES</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. <u>HISTORICAL AND ARCHAEOLOGICAL</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A walkover of the area did not reveal any artifacts or signs of occupation. If during operations resources were to be discovered, activities would be halted and moved to another area until SHPO was contacted and the importance of the site was determined.
12. <u>AESTHETICS</u> : noise, visual	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The permit area cannot be seen from any public points of access. Removal of dredge tailings would reduce the visual impact of pre-law mining disturbance.
13. <u>ENVIRONMENTAL PLANS AND GOALS</u> : local, regional	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The proposed operation complies with county zoning regulations.
14. <u>DEMANDS ON ENVIRONMENTAL RESOURCES</u> : land, water, air, energy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
15. <u>TRANSPORTATION</u> : networks, traffic flows	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	A portion of the gravel would be used in a subdivision adjacent to the mine site and would not be transported on or across any public roads. Conversely, there is a subdivision under construction on the other side of Highway 282 and gravel would be transported across the highway. Traffic crossing the highway would have to comply with all traffic law. The potential impacts of crossing Highway 282 from the proposed site should be less than those impacts that would result from the importation of material from more distant sites.

**ALTERNATIVES CONSIDERED:** The Department would deny an incomplete application or one that does not comply with the Act and Rules. The proponent could then submit a modified application or submit an application for another site.

**PUBLIC INVOLVEMENT:** Agencies and individuals involved in the process included the Montana Natural Heritage Program, State Historic Preservation Office, local zoning authority, county weed control board, and landowner.

**OTHER GROUPS OR AGENCIES CONTACTED OR WHICH MAY HAVE OVERLAPPING JURISDICTION:**  
DEQ's Air Resources Management Bureau regarding air quality, DEQ's Water Protection Bureau regarding water discharge, DNRC's Water Rights Bureau regarding water rights, and MSHA and OSHA regarding mine safety.

**REGULATORY IMPACT ON PRIVATE PROPERTY:** The analysis done in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

**RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS:** NO FURTHER ANALYSIS

**INDIVIDUALS OR GROUPS CONTRIBUTING TO THIS EA:** NONE

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Approved By: \_\_\_\_\_ Date: \_\_\_\_\_  
(Signature)

Prepared by: Peter Mahrt